THE MYTHS OF VEGETARIANISM

long with the unjustified and unscientific saturated fat and cholesterol scares of

THE EVOLUTION OF A MYTH

the past several decades has come the notion that vegetarianism is a healthier dietary option for people. It seems as if every health expert and government health agency is urging people to eat fewer animal products and consume more vegetables, grains, fruits and legumes. Along with these exhortations have come assertions and studies supposedly proving that vegetarianism is healthier for people and that meat consumption is associated with sickness and death. Several authorities, however, have questioned these data, but their objections have been largely ignored.

An unflinching determination to take the whole evidence into account is the only method of preservation against the fluctuating extremes of fashionable opinion.

— Alfred North Whitehead

As we shall see, many of the vegetarian claims cannot be substantiated and some are simply false and dangerous. There are benefits with vegetarian diets for certain health conditions, and some people function better on less fat and protein, but, as a practitioner who has dealt with several former vegetarians and vegans (total vegetarians), I know full well the dangerous effects of a diet devoid of healthful animal products. It is my hope that all readers will more carefully evaluate their position on vegetarianism after reading this paper.

MYTH #1: Meat consumption contributes to famine and depletes the Earth's natural resources.

Some vegetarians have claimed that livestock require pasturage that could be used to farm grains to feed starving people in Third World countries. It is also claimed that feeding animals contributes to world hunger because livestock are eating foods that could go to feed humans. The solution to world hunger, therefore, is for people to become vegetarians. These arguments are illogical and simplistic.

The first argument ignores the fact that about two-thirds of our Earth's dry land is unsuitable for farming. It is primarily the open range, desert and mountainous areas that provide food to grazing animals, and that land is currently being put to good use.

The second argument is faulty as well because it ignores the vital contributions that livestock animals make to humanity's well-being. It is also misleading to think that the foods grown and given to feed livestock could be diverted to feed humans:

Agricultural animals have always made a major contribution to the welfare of human societies by providing food, shelter, fuel, fertilizer and other products and services. They are a renewable resource, and utilize another renewable resource, plants, to produce these products and services. In addition, the manure produced by the animals helps improve soil fertility and, thus, aids the plants. In some developing countries the manure cannot be utilized as a fertilizer but is dried as a source of fuel.

There are many who feel that because the world population is growing at a faster rate than is the food supply, we are becoming less and less able to afford animal foods because feeding plant products to animals is an inefficient use of potential human food. It is true that it is more efficient for humans to eat plant products directly rather than to allow animals to convert them to human food. At best, animals only produce one pound or less of human food for each three pounds of plants eaten. However, this inefficiency only applies to those plants and plant products that

Contrary to the claims of some health exponents, diets which are strictly vegetarian and do not include animal foods are a recipe for ill health.

Part 1 of 2

by Stephen Byrnes, PhD, RNCP © 2000, 2002

Email: drbyrnes1@hotmail.com Website: http://www.PowerHealth.net

the human can utilize. The fact is that over two-thirds of the feed fed to animals consists of substances that are either undesirable or completely unsuited for human food. Thus, by their ability to convert inedible plant materials to human food, animals not only do not compete with the human; rather, they aid greatly in improving both the quantity and the quality of the diets of human societies.²

Furthermore, at the present time, there is more than enough food grown in the world to feed all people on the planet. The problem is widespread poverty, making it impossible for the starving poor to afford it. In a comprehensive report, the Population Reference Bureau attributed the world hunger problem to poverty, not meat-eating.3 It also did not consider mass vegetarianism to be a solution for world hunger.

What would actually happen, however, if animal husbandry were abandoned in favour of mass agriculture, brought about by humanity turning towards vegetarianism?

If a large number of people switched to vegetarianism, the demand for meat in the United States and Europe would fall,

the supply of grain would dramatically increase, but the buying power of poor [starving] people in Africa and Asia wouldn't change at all.

The result would be very predictable: there would be a mass exodus from farming. Whereas today the total amount of grains produced could feed 10 billion people, the total amount of grain grown in this post-meat world would likely fall back to about 7 or 8 billion. The trend of farmers selling their land to developers and others would accelerate quickly.4

There is little doubt, though, that commercial farming methods, whether of plants or animals, produce harm to the environment. With the heavy use of agrichemicals, pesticides, artificial fertilisers, hormones, steroids and antibiotics common in modern agriculture, a better way of integrating animal husbandry with agriculture needs to be found. A possible solution might be a return to

ducks in the same rice paddies resulted in 500 million cases

"mixed farming", described below.

of influenza during the same year.7

The educated consumer and the enlightened farmer together can bring about a return of the mixed farm, where cultivation of fruits, vegetables and grains is combined with the raising of livestock and fowl in a manner that is efficient, economical and environmentally friendly. For example, chickens running free in garden areas eat insect pests, while providing high-quality eggs; sheep grazing in orchards obviate the need for herbicides; and cows grazing in woodlands and other marginal areas provide rich, pure milk, making these lands economically viable for the farmer. It is not animal

cultivation that leads to hunger and famine, but unwise agricultural practices and monopolistic

distribution systems.8

The "mixed farm" is also healthier for the soil, which will yield more crops if managed according to traditional guidelines. Mark Purdey has accurately pointed out that a crop field on a mixed farm will yield up to five harvests a year, while a "mono-cropped" one will only yield one or two.9 Which farm is producing more food for the world's peoples? Purdey well sums up the ecological horrors of "battery farming"

and points to future solutions by saying:

Our agricultural establishments could do very well to outlaw the business-besotted farmers running intensive livestock units, battery systems and beef-burger bureaucracies, with all their wastages, deplorable cruelty, anti-ozone slurry systems, drug/chemical-induced immunotoxicity resulting in BSE and salmonella, rainforest eradication, etc. Our future direction must strike the happy, healthy medium of mixed farms, resurrecting the old traditional extensive system as a basic framework, then bolstering up productivity to presentday demands by incorporating a more updated application of biological science into farming systems. 10

It does not appear, then, that livestock farming, when properly practised, damages the environment. Nor does it appear that world vegetarianism and exclusively relying on agriculture to supply the world with food are feasible or ecologically wise ideas.

MYTH #2: Vitamin B12 can be obtained from plant sources.

Of all the myths, this is perhaps the most dangerous. While lacto and lacto-ovo vegetarians have sources of vitamin B12 in their diets (from dairy products and eggs), vegans (total vegetarians) do not. Vegans who do not supplement their diet with vitamin B12 will eventually get anaemia (a fatal condition) as well as severe nervous and digestive system damage. Most, if not all,

Vegans who do not supplement their diet with vitamin B12 will eventually get anaemia (a fatal condition) as well as severe nervous and digestive system damage.

In other words, there would be *less* food available for the world to eat. Furthermore, the monoculture of grains and legumes, which is what would happen if animal husbandry were abandoned and the world relied exclusively on plant foods for its food, would rapidly deplete the soil and require the heavy use of artificial fertilisers, one ton of which requires ten tons of crude oil to

As far as the impact on our environment is concerned, a closer look reveals the great damage that exclusive and mass farming would do. British organic dairy farmer and researcher Mark Purdey wisely points out that if "veganic agricultural systems were to gain a foothold on the soil, then agrichemical use, soil erosion, cash cropping, prairie-scapes and ill health would escalate".6 Neanderthin author Ray Audette concurs with this view:

Since ancient times, the most destructive factor in the degradation of the environment has been monoculture agriculture. The production of wheat in ancient Sumeria transformed once-fertile plains into salt flats that remain sterile 5,000 years later. As well as depleting both the soil and water sources, monoculture agriculture also produces environmental damage by altering the delicate balance of natural ecosystems. World rice production in 1993, for instance, caused 155 million cases of malaria by providing breeding grounds for mosquitoes in the paddies. Human contact with vegans have impaired B12 metabolism, and every study of vegan groups has demonstrated low vitamin B12 concentrations in the majority of individuals.¹¹ Several studies have been done, documenting B12 deficiencies in vegan children—deficiencies which often have had dire consequences.¹² Additionally, claims are made in vegan and vegetarian literature that B12 is present in certain algae, in tempeh (a fermented soy product) and in brewer's yeast. All of them are false, as vitamin B12 is only found in animal foods. Brewer's and nutritional yeasts do not contain B12 naturally; they are always fortified from an outside source.

There are not real B12 vitamins in plant sources but B12

analogues; these are similar to true B12 but not exactly the same, and because of this they are not bioavailable. 13 It should be noted here that these B12 analogues can impair absorption of true vitamin B12 in the body due to competitive absorption, placing vegans and vegetarians who consume lots of soy, algae and yeast at a greater risk for a deficiency. 14

Some vegetarian authorities claim that B12 is produced by certain fermenting bacteria in the colon. This may be true, but it is in a form unusable by the body. B12 requires intrinsic factor from the stomach for proper absorption in the ileum. Since

the bacterial product does not have intrinsic factor bound to it, it cannot be absorbed.¹⁵

It is true that Hindu vegans living in certain parts of India do not suffer from vitamin B12 deficiency. This has led some to conclude that plant foods do provide this vitamin. This conclusion is erroneous, however, because many small insects, their faeces, eggs, larvae and/or residue, are left on the plant foods these people consume, due to non-use of pesticides and inefficient cleaning methods. This is how these people obtain their vitamin B12. This contention is borne out by the fact that when vegan Indian Hindus migrated to England, they came down with megaloblastic anaemia within a few years. In England, the food supply is cleaner and insect residues are completely removed from plant foods.\(^{16}\)

The only reliable and absorbable sources of vitamin B12 are animal products, especially organ meats and eggs.¹⁷ Though present in lesser amounts than meat and eggs, dairy products do contain B12. Vegans, therefore, should consider adding dairy products to their diets. If dairy cannot be tolerated, eggs, preferably from free-run hens, are a virtual necessity.

That vitamin B12 can only be obtained from animal foods is one of the strongest arguments against veganism being a "natural" way of human eating. Today, vegans can avoid anaemia by taking supplemental vitamins or fortified foods. If those same people had lived just a few decades ago when these products were unavailable, they would have died.

MYTH #3: Our needs for vitamin D can be met by sunlight.

This is not really a vegetarian myth *per se*, but it is widely believed that one's vitamin D needs can be met simply by exposing one's skin to the Sun's rays for 15 to 20 minutes a few times a week. Concerns about vitamin D deficiencies in vegetarians and

vegans always exist, as this nutrient in its full-complex form is only found in animal fats,¹⁸ which vegans do not consume and more moderate vegetarians only consume in limited quantities due to their meatless diets.

It is true that a limited number of plant foods, such as alfalfa, sunflower seeds and avocado, contain the plant form of vitamin D: ergocalciferol, or vitamin D2. Although D2 can be used to prevent and treat the vitamin D deficiency disease rickets in humans, it is questionable whether this form is as effective as animal-derived vitamin D3 (cholecalciferol). Some studies have shown that D2 is not utilised as well as D3 in animals, ¹⁹ and

clinicians have reported disappointing results using vitamin D2 to treat vitamin D–related conditions.²⁰

Although vitamin D can be created by our bodies by the action of sunlight on our skin, it is very difficult to obtain an optimal amount of vitamin D by having a brief foray in the sunshine. There are three ultraviolet bands of radiation that come from sunlight, i.e., A, B and C. Only the "B" form is capable of catalysing the conversion of cholesterol to vitamin D in our bodies,²¹ and UV-B rays are only present at certain times of day, at certain latitudes, and at certain times of the year.²² Furthermore, depending on

one's skin colour, obtaining 200–400 IUs of vitamin D from sunlight can take as long as two full hours of continuous sunning.²³ A dark-skinned vegan, therefore, will find it impossible to obtain optimal vitamin D intake by sunning himself for 20 minutes a few times a week, even if sunning occurs during those limited times of the day and year when UV-B rays are available.

The current RDA for vitamin D is 400 IUs, but Dr Weston Price's seminal research into healthy native adults' diets showed that their daily intake of vitamin D (from animal foods) was about 10 times that amount, or 4,000 IUs.²⁴ Accordingly, Dr Price placed a great emphasis on vitamin D in the diet. Without vitamin D, for example, it is impossible to utilise minerals like calcium, phosphorus and magnesium. Recent research has confirmed Dr Price's higher recommendations for vitamin D for adults.²⁵

Considering that cases of rickets and/or low vitamin D levels have been well documented in many vegetarians and vegans,²⁶ that animal fats are either lacking or deficient in vegetarian diets (as well as those of the general Western public who routinely try to cut their animal fat intake), that sunlight is only a source of vitamin D at certain times and at certain latitudes and that current dietary recommendations for vitamin D are too low, it is important to have reliable and abundant sources of this nutrient in our daily diets. Good sources include cod liver oil, lard from pigs that were exposed to sunlight, shrimp, wild salmon, sardines, butter, full-fat dairy products and eggs from properly fed chickens.

MYTH #4: The body's needs for vitamin A can be entirely obtained from plant foods.

True vitamin A, or retinol and its associated esters, is only found in animal fats and organs like liver.²⁷ Plants do contain beta-carotene, a substance that the body can convert into vitamin A if certain conditions are present (see below). Beta-carotene, however, is not vitamin A. It is typical for vegans and vegetarians

True vitamin A, or retinol

and its associated esters.

is only found in animal fats

and organs like liver.

(as well as most popular nutrition writers) to say that plant foods like carrots and spinach contain vitamin A and that beta-carotene is just as good as vitamin A. These things are not true, even though beta-carotene is an important nutritional factor for humans

The conversion from carotene to vitamin A in the intestines can only take place in the presence of bile salts. This means that fat must be eaten with the carotenes to stimulate bile secretion. Additionally, infants and people with hypothyroidism, gall bladder problems or diabetes (altogether, a significant portion of the population) either cannot make the conversion or do so very poorly. Lastly, the body's conversion from carotene to vitamin A is not very efficient: it takes roughly six units of carotene to make one unit of vitamin A. What this means is that a sweet potato (containing about 25,000 units of beta-carotene) will only convert into about 4,000 units of vitamin A (assuming you ate it with fat, are not diabetic, are not an infant, and do not have a thyroid or gall bladder problem).²⁸

Relying on plant sources for vitamin A, then, is not a very wise idea. This provides yet another reason to include animal foods and fats in our diets. Butter and full-fat dairy foods, especially from pastured cows, are good vitamin A sources, as is cod liver oil. Vitamin A is all-important in our diets, for it enables the body to use proteins and minerals, ensures proper vision, enhances the immune system, enables reproduction and fights infections.29 As with vitamin D, Dr Price found that the diets of healthy primitive peoples supplied substantial amounts of vitamin A, again emphasising the great need humans have for this nutrient in

maintaining optimal health now and in future generations.

MYTH #5: Meat-eating causes osteoporosis, kidney disease, heart disease, and cancer.

Oftentimes, vegans and vegetarians will try to scare people into avoiding animal foods and fats by claiming that vegetarian diets offer protection from certain chronic diseases like the ones listed above. Such claims, however, are hard to reconcile with historical and anthropological facts.

All of the diseases mentioned are primarily 20th century occurrences, yet people have been eating meat and animal fat for many thousands of years. Further, as Dr Price's research showed, there were/are several native peoples around the world (the Innuit, Masai, Swiss, etc.) whose traditional diets were/are very rich in animal products, but who nevertheless did/do not suffer from the abovementioned maladies.³⁰ Dr George Mann's independent studies of the Masai, done many years after Dr Price's, confirmed the fact that the Masai, despite being almost exclusive meat-eaters, nevertheless had little to no incidence of heart disease or other chronic ailments.³¹ This proves that other factors besides animal foods are at work in causing these diseases.

Several studies have supposedly shown that meat consumption is the cause of various illnesses, but such studies, honestly evaluated, show no such thing, as the following discussion shows.

Osteoporosis

Dr Herta Spencer's research on protein intake and bone loss clearly showed that protein consumption in the form of real meat has no impact on bone density. Studies that supposedly proved that excessive protein consumption equals more bone loss were not done with real meat but with fractionated protein powders and isolated amino acids.³² Recent studies have also shown that increased animal protein intake *contributes* to stronger bone density in men and women.³³ Some recent studies on vegan and vegetarian diets, however, have shown them to predispose women to osteoporosis.³⁴

• Kidney Disease

All of the diseases mentioned

are primarily 20th century

occurrences, yet people

have been eating meat

and animal fat for many

thousands of years.

Although protein-restricted diets are helpful for people with kidney disease, there is no proof that eating meat causes such disease. Vegetarians will also typically claim that animal protein causes overly acidic conditions in the blood, resulting in calcium leaching from the bones and, hence, a greater tendency to form kidney stones. However, this opinion is false.

Theoretically, the sulphur and phosphorus in meat can form an acid when placed in water, but this does not mean that that is what

ater, but this does not mean that that is what happens in the body. Actually, meat

contains complete proteins and vitamin D (if the skin and fat are eaten), both of which help maintain pH balance in the bloodstream. Furthermore, if one eats a diet that includes enough magnesium and vitamin B6 and restricts refined sugars, one has little to fear from kidney stones, whether one eats meat or not.³⁶ Animal foods like beef, pork, fish and lamb are good sources of magnesium and B6, as any food/nutrient table will show.

Heart Disease

The belief that animal protein contributes to heart disease is a popular

one that has no foundation in nutritional science. Outside of questionable studies, there is little data to support the idea that meateating leads to heart disease. For example: the French have one of the highest per-capita consumptions of meat, yet have low rates of heart disease; in Greece, meat consumption is higher than average, but rates of heart disease are low there as well; and in Spain, an increase in meat-eating (in conjunction with a reduction in sugar and high-carbohydrate intake) was found to lead to a *decrease* in heart disease.³⁷

• Cancer

The belief that meat, in particular red meat, contributes to cancer is also a popular idea that is not supported by the facts. Although it is true that some studies have shown a connection between meat-eating and some types of cancer,³⁸ it is important to look at the studies carefully to determine what kind of meat is being discussed as well as what preparation methods were used. Since we only have one word for "meat" in English, it is often difficult to know which "meat" is under discussion in a study unless the authors of the study specifically say so.

The study which began the "meat equals cancer" theory was done by Dr Ernst Wynder in the 1970s. Dr Wynder claimed that there is a direct, causal connection between animal fat intake and incidence of colon cancer.³⁹ Actually, his data on "animal fats" were really on vegetable fats.⁴⁰ In other words, the "meat equals cancer" theory is based on a phony study.

If one looks closely at the research, however, one quickly sees that it is processed meats like cold cuts and sausages that are

usually implicated in cancer causation, 41 and not meat per se. Furthermore, cooking methods seem to play a part in whether or not a meat becomes carcinogenic.⁴² In other words, it is the chemicals added to the meat and the chosen cooking method that are at fault, not the meat itself.

In the end, although sometimes a connection between meat and cancer is found, the actual mechanism of how it happens has eluded scientists.⁴³ This means that it is likely that other factors besides meat are playing roles in some cases of cancer. Remember, studies of meat-eating traditional peoples show very little incidence of cancer. This demonstrates that other factors are at work when cancer appears in a modern meat-eating person. It is not scientifically fair to single out one dietary factor for blame, while ignoring other, more likely candidates.

It should be noted here that Seventh Day Adventists are often studied in population analyses to prove that a vegetarian diet is healthier and is associated with a lower risk for cancer (but see a later paragraph in this section). While it is true that most members of this Christian denomination do not eat meat, they also do not smoke or drink alcohol, coffee and tea, all of which are likely factors in promoting cancer.44

The Mormons are a religious group often overlooked in vegetarian studies. Although their Church urges moderation, Mormons do not abstain from meat. As with the Adventists, Mormons also avoid tobacco, alcohol and caffeine. Despite being meat-eaters, Utah Mormons showed in a study that they had a 22% lower rate for cancer in general and a 34% lower mortality rate for colon cancer than the US average.45 A study of Puerto Ricans, who eat large amounts of fatty pork, nevertheless revealed very low rates of colon and breast cancer.46 Similar results can be adduced to demonstrate that meat and animal fat consumption does not correlate with cancer.47 Obviously, other factors are at work.

It is usually claimed that vegetarians have lower cancer rates than meat-eaters, but a 1994 study of vegetarian California Seventh Day Adventists showed that, while they did have lower rates for some cancers (e.g., breast and lung), they had higher rates for several others (Hodgkin's disease, malignant melanoma, brain, skin, uterine, prostate, endometrial, cervical and ovarian), some quite significantly. In that study, the authors actually admitted that "Meat consumption, however, was not associated with a higher [cancer] risk" and that "No significant association between breast cancer and a high consumption of animal fats or animal products in general was noted".48

Further, it is usually claimed that a diet rich in plant foods like whole grains and legumes will reduce one's risks for cancer, but research going back through the last century demonstrates that carbohydrate-based diets are the prime dietary instigators of cancer, not diets based on minimally processed animal foods. 49

The mainstream health and vegetarian media have done such an effective job of "beef-bashing" that most people think there is nothing healthful about meat, especially red meat. In reality, however, animal-flesh foods like beef and lamb are excellent

sources of a variety of nutrients, as any food/nutrient table will show. Nutrients like vitamins A, D and several of the B-complex vitamins, essential fatty acids (in small amounts), magnesium, zinc, phosphorus, potassium, iron, taurine and selenium are abundant in beef, lamb, pork, fish, shellfish and poultry. Nutritional factors like coenzyme Q10, carnitine and alpha-lipoic acid are also present. Some of these nutrients are only found in animal foods; plants do not supply them.

MYTH #6: Saturated fats and dietary cholesterol cause heart disease, atherosclerosis and/or cancer, and lowfat, low-cholesterol diets are healthier for people.

This, too, is not a specific vegetarian myth. Nevertheless, people are often urged to take up a vegetarian or vegan diet because it

> is believed that such diets offer protection against heart disease and cancer, since they are lower or lacking in animal foods and fats.

> Although it is commonly believed that saturated fats and dietary cholesterol "clog" arteries and cause heart disease, such ideas have been shown to be false by such scientists as Linus Pauling, Russell Smith, George Mann, John Yudkin, Abram Hoffer, Mary Enig, Uffe Ravnskov and other prominent researchers.⁵⁰ On the contrary, studies have shown that arterial plaque is primarily composed of unsaturated fats, particularly polyunsaturated ones, and not the saturated fat of animals, palm or coconut.51

Trans fatty acids, as opposed to saturated fats, have been shown by researchers such as Enig, Mann and Fred Kummerow to be causative factors in accelerated atherosclerosis, coronary heart disease, cancer and other ailments.52 Trans fatty acids are found in such modern foods as margarine and vegetable shortening and foods made with them. Dr Enig and her colleagues have also shown that excessive omega-6 polyunsaturated fatty acid intake from refined vegetable oils is also a major culprit behind cancer and heart disease, not animal fats.

A recent study of thousands of Swedish women supports Dr Enig's conclusions and data. It showed no correlation between saturated fat consumption and increased risk for breast cancer. However, the study did show, as did Enig's work, a strong link between vegetable oil intake and higher breast cancer rates.⁵⁵

The major population studies that supposedly prove the theory that animal fats and cholesterol cause heart disease, actually do not prove it upon closer inspection. The Framingham Heart Study is often cited as proof that dietary cholesterol and saturated fat intake cause heart disease and ill health. Involving about 6,000 people, the study compared two groups over several decades at five-year intervals. One group consumed little cholesterol and saturated fat, while the other consumed high amounts. Surprisingly, Dr William Castelli, the study's director, said:54

...the more saturated fat one ate, the more cholesterol one ate, the more calories one ate, the lower the person's serum cholesterol ... we found that the people who ate the most cholesterol, ate the most saturated fat...ate the most calories, weighed the least and were the most physically active.

The Framingham data did show that subjects who had higher cholesterol levels and weighed more ran a slightly higher chance for coronary heart disease. But weight gain and serum cholesterol levels had an *inverse* correlation with dietary fat and cholesterol intake. In other words, there was no correlation at all.⁵⁵

In a similar vein, the US Multiple Risk Factor Intervention Trial, sponsored by the National Heart and Lung Institute, compared mortality rates and eating habits of 12,000+ men. Those who ate less saturated fat and cholesterol showed a slightly reduced rate of heart disease, but had an overall mortality rate much higher than the other men in the study.⁵⁶

Low-fat/cholesterol diets, therefore, are not healthier for people. Studies have shown repeatedly that such diets are associated with depression, cancer, psychological problems, fatigue, violence and suicide.⁵⁷ Women with lower serum cholesterol live shorter lives than women with higher levels.⁵⁸ Similar findings have been noted in men.⁵⁹

Children on low-fat and/or vegan diets can suffer from growth problems, failure to thrive, and learning disabilities. Despite this, sources from Dr Benjamin Spock to the American Heart Association recommend low-fat diets for children! One can only

lament the fate of those unfortunate youngsters who will be raised by unknowing parents taken in by such genocidal misinformation.

There are many health benefits to saturated fats, depending on the fat in question. Coconut oil, for example, is rich in lauric acid, a potent antifungal and antimicrobial substance. In addition, coconut contains appreciable amounts of caprylic acid, also an effective antifungal.⁶¹ Butter from freerange cows is rich in trace minerals, especially selenium, as well as all of the fat-soluble vitamins and beneficial fatty acids that protect against cancer and fungal infections.⁶²

In fact, the body needs saturated fats in order to properly utilise essential fatty acids.⁶³ Saturated fats also lower the blood levels of the artery-damaging lipoprotein (a);⁶⁴ are needed for proper calcium utilisation in the bones;⁶⁵ stimulate the immune system;⁶⁶ are the preferred food for the heart and other vital organs;⁶⁷ and, along with cholesterol, add structural stability to the cell and intestinal wall.⁶⁸ They are excellent for cooking, as they are chemically stable and do not break down under heat, unlike polyunsaturated vegetable oils. Omitting them from one's diet, then, is ill-advised.

With respect to atherosclerosis, it is always claimed that vegetarians have much lower rates of this condition than meat-eaters. The International Atherosclerosis Project of 1968, however, which examined over 20,000 corpses from several countries, concluded that vegetarians had just as much atherosclerosis as meat-eaters.⁶⁹

Other population studies have revealed similar data.⁷⁰ This is because atherosclerosis is largely unrelated to diet; it is a consequence of ageing.

There are things which can *accelerate* the atherosclerotic process, such as excessive free radical damage to the arteries from antioxidant depletion (caused by such things as smoking, poor diet, excess polyunsaturated fatty acids in the diet, various nutritional deficiencies, drugs, etc.), but this is to be distinguished from the fatty-streaking and hardening of arteries that occurs in all peoples over time.

It also does not appear that vegetarian diets protect against heart disease. A study on vegans in 1970 showed that female vegans had higher rates of death from heart disease than non-vegan females.⁷¹ A recent study showed that Indians, despite being vegetarians, have very high rates of coronary artery disease.⁷² High-carbohydrate/low-fat diets (which is what vegetarian diets are) can also place one at a greater risk for heart disease, diabetes and cancer due to their hyperinsulemic effects on the body.⁷³ Recent studies have also shown that vegetarians have higher homocysteine levels in their blood.⁷⁴ Homocysteine is a known cause of heart disease. Lastly, low-fat/cholesterol diets, generally favoured either to prevent or treat heart disease, do neither and may actually increase certain risk factors for this condition.⁷⁵

Studies which conclude that vegetarians are at a lower risk for heart disease are typically based on the phony markers of lower saturated fat intake, lower serum cholesterol levels and HDL/LDL ratios.

Since vegetarians tend to eat less saturated fat and usually have lower serum cholesterol levels, it is concluded that they are at less risk for heart disease. However, once one realises that these measurements are not accurate predictors of proneness to heart dis-

ease, the supposed protection of vege-

tarianism melts away.76

It should always be remembered that a number of things factor in as to whether a person gets heart disease or cancer. Instead of focusing on the phony issues of saturated fat, dietary cholesterol and meat-eating, people should pay more attention to other, more likely factors. These would be *trans* fatty acids, excessive polyunsaturated fat intake, excessive sugar intake, excessive carbohydrate intake, smoking, certain vitamin and mineral deficiencies, and obesity. These things were all conspicuously absent

in the healthy traditional peoples whom Dr Price studied.

Continued next issue...

Author's Notes:

In fact, the body needs

saturated fats in order to

properly utilise essential

fatty acids.

- Thanks to Sally Fallon, MA, Lee Clifford, MS, CCN, and Dr H. Leon Abrams, Jr, for their gracious assistance in preparing and reviewing this paper.
- This paper was not sponsored or paid for by the meat or dairy industries.

Editor's Notes:

- Due to space limitations, we are not able to publish the endnotes accompanying Dr Stephen Byrnes's article. Instead, we have posted these on our website, http://www.nexusmagazine.com, but we can also email and snail-mail them upon request. The full text of the article, including endnotes, is also available on the author's website at http://www.powerhealth.net/selected_articles.htm.
- Dr Stephen Byrnes's article was originally published in the *Townsend Letter for Doctors & Patients*, July 2000, and was revised in January 2002.

About the Author:

Stephen Byrnes, PhD, RNCP, enjoys robust health on a diet that includes butter, cream, eggs, meat, whole milk, cheese and liver. He is the author of *Diet & Heart Disease: It's NOT What You Think* and *Digestion Made Simple* (Whitman Books, 2001), and *The Lazy Person's Whole Foods Cookbook* (Ecclesia Life Mana, 2001). He is based in the USA. Visit his website at http://www.PowerHealth.net.